Byford (H. T.)

REPORT OF A

CASE OF PELVIC ABSCESS,

WITH AUTOPSY.

Remarks Upon the Treatment.

By HENRY T. BYFORD, M. D.,

Containing the Discussion of the Chicago Gynæcological Society, December 18th, 1885.

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Report of a Case of Pelvic Abscess.

WITH REMARKS UPON THE TREATMENT.

By HENRY T. BYFORD, M. D., Chicago.

(Read before the Chicago Gynæcological Society, December 18th, 1885.)

Mrs. T., aged twenty-five years; married five years; German descent; of nervous temperament; small and slight in figure, but in good general health, consulted me, during the fall of the year 1884, for sterility and dysmenorrhœa. She had never menstruated without pain, but had otherwise enjoyed good health. An examination revealed a small uterus and cervix, with acute anteflexion and consequent apposition of the anterior and posterior uterine walls. Slippery elm tents, used about once in eight days, alternated with glycerine tampons, had for their effect a gradual relief of the dysmenorrhœa.

About the middle of the following February, I was called to her house to treat her for pelvic cellulitis, contracted a week before while returning home from a dance. The whole pelvic connective tissue seemed involved, and large tender lumps could be felt externally in the left iliac region.

Six weeks from the beginning of the attack, an abscess opened into the anterior wall of the rectum, about two inches from the external anal orifice. On account of the extreme debility of the patient, her horror of operative procedures, and the absence of any well marked fluctuation, all surgical interference with the suppurative process had been out of the question.

Attempts were then made at thorough antiseptic treatment, but neither elastic nor flexible-metal tubes, although easily introduced into the abscess, could be tolerated there longer than a few hours at a time. Antiseptic irrigations of carbolic and boracic acid solutions, used four times a day, were

then relied upon, but were inefficacious, for the pockets often discharged foul-smelling pus soon after the dressings.

In the meantime the pulse remained in the neighborhood of 120, and the temperature fluctuated between 99° and 102° F.; attacks of acute suffering and septicæmic diarrhœa required opiates for their relief; the bacillus tuberculosis was discovered in the pus; yellow pigmentary deposits covered her face; emaciation became extreme, her weight ranging between eighty-two and eighty-three and one-half pounds. Her courage began to fail, and finally, after the concurrent recommendation of the consultants, Drs. Wm. H. Byford, J. E. Owens, Geo. M. Chamberlin and Martin Matter, she consented to an operation.

Accordingly, on the 6th of June, Dr. Wm. H. Byford operated according to his usual method in such cases. After etherization, he forcibly dilated the sphincter of the anus, tore open the fistulous track with the finger, and then enlarged the opening in the same manner, in the direction of the lowest part of the cavity, until it readily admitted two fingers. I then made a digital examination, and found the abscess to extend across he pelvis, behind the uterus and broad ligaments, to a point above the level of the fundus uteri on the left side, and to be filled with bands and projecting masses of granulation-tissue of about the consistency of freshly coagulated blood. Previous treatment, except to diminish and control the septicæmia, had evidently been a complete failure. All of this medullary tissue was then scooped out with the finger and the cavity thoroughly cleansed with a two and a half per cent. solution of carbolic acid.

The highest temperature after the operation was 99° F., on the day following. Perfect drainage had been secured, for at the time of each dressing no pus was found inside of the abscess.

June 12th. Abscess-opening still an inch in diameter, without any apparent induration about its edges. Temperature normal. Patient allowed to get up. Expressed herself as feeling perfectly well.

June 16th. Took a buggy ride with benefit. Weight eighty-four pounds.

June 23d. A little pus found in the abscess at each dressing. Sphincter ani firm and contracted, causing some trouble by retaining pus, and interfering with irrigation. Attempted forcible dilatation with the aid of cocaine hydrochlorate, but failed to secure sufficient anæsthesia. Abscess-opening contracting.

June 25th. A. M., temperature 99 2-5° F.; P. M., 99 3–10.

June 28th. A. M., temperature 98 4–5. Not much discharge. Pain in iliac region and breasts, such as she formerly felt before menstruating. Abscess-opening almost closed by the uterus being drawn back over it. Would not consent to another operation.

June 29. An increase of discharge.

June 30. Dilated the abscess-opening with a large sponge tent, and washed it out thoroughly.

July 1. Temperature normal. Pains gone. Weight eighty-eight pounds.

She was now allowed to visit her relatives in Chesterton, Indiana, where she came under the care of Dr. D. D. Marr. He continued the antiseptic irrigations, and used sponge tents as often as the opening contracted. He reported to me as follows:

"July 8th. Patient has gained two and a half pounds "in weight. Pulse 115.

"July 16. Gain of half a pound. Less discharge. A sup- "pository of iodoform is left in abscess after each dressing.

"July 28th. Patient much improved. Rode twenty miles "a few days ago in a buggy. Heavy deposits of phosphates in "the urine. A pocket of pus is giving trouble by filling and "discharging. Iodoform insufflations commenced.

"Aug. 12th. Abscess was closed up for a few days. This "was accompanied by night-sweats and pains, and was soon "followed by a copious discharge of fetid pus."

After consulting together, we decided to allow a solid piece of sulphate of copper to dissolve in the abscess-cavity.

Aug. 20th. The doctor writes: "Owing to an epidemic in "a little village near here I have been very busy and put off "reporting Mrs. T's condition. I placed a piece of sulphate "of copper, weighing a dram and a half, in the abscess (well "up), which had a most wonderful and I hope happy effect. "* * * The opening of the abscess, previous to the using "of the sulphate, was contracted, thickened and indurated, so "that it was quite difficult to introduce a finger, but after the "use of the remedy the induration and thickening disappeared, "so that two fingers can be inserted, and the opening seems "thin and quite dilatable. I believe this action has extended "over the whole abscess wall, with the exfoliation of the pyo-"genic membrane, which came away in shreds and patches "(much to my surprise). The only inconvenience was that there was somewhat of a seeping of the sulphate into the "rectum, which resulted in some irritation. Mrs. T. is im-"proving, and feeling stronger and greatly encouraged."

The abscess healed rapidly after this. Her pulse became normal, and her appetite unusually keen. By the first of September, two weeks after the cauterization, she had gained thirteen pounds, declared herself to be as well and strong as ever in her life, and was visiting all over the town in almost childish enjoyment of her regained health and vigor. A

shallow depression was all that was left of the abscess. The menstrual flow had not shown itself since the commencement of her illness.

Early in September she was attacked with the then prevalent epidemic, dysentery, and died on the 23rd instant.

At the post-mortem examination, made about thirty hours after death, I was somewhat hampered on account of a promise, exacted by the husband, that no organ should be taken out of the body, and by the fact that I had but thirty minutes for work before train-time. The body had again become extremely emaciated. Abdomen was flat. An incision was made from a little above the umbilicus to the pubic bone. The pelvis was filled posteriorly with a solid mass of plastic tissue, which had drawn the uterus backwards to within about half an inch of the sacrum, so as to put the anterior vaginal wall upon the stretch, and had buried the uterus and other pelvic organs in its substance. Both round ligaments were seen issuing from this mass. It was necessary to cut down about half an inch before reaching the depressed uterus, and to tear through solid tissue behind it to arrive at the rectum below. The finger broke through into the rectum, behind the dimpled cicatrix that marked the site of the former outlet of the abscess. The left broad ligament was then felt to be represented by, or inclosed in, a tough band half an inch thick antero-posteriorly, extending from the uterus to the left side of the pelvis. The left ovary could not be found. A small flat piece of what seemed to be ovarian tissue was found adhered to the bladder on the right side. The right broad ligament was apparently disorganized and inseparable from the plastic deposit. The rectum was held inflated at the point where it issued from the pelvis, was dark colored and injected on its external surface, and blackish and softened on the

internal. Neither the appearance nor the odor of an abscess could anywhere be discovered.

Allow me in this connection to quote the following extracts from a letter, written to me by Dr. Marr on the twenty-eighth day of the same month:

"Yours of the 26th is at hand. * * * Owing to the "hurried examination, I extended it somewhat after you left, "with the result of fully confirming your views of the uterus "and its appendages. * * * I extended the examination "to the alimentary canal, and found the conditions peculiar to "that disease (epidemic dysentery) extending over the whole "of the large intestine and a part of the smaller, with intense "congestion of the stomach and peritoneum. The mucous "membrane of the larger bowel was very dark, ulcerated "and sloughy, the inflammation extending to the muscular "coat."

There seem to have been two hinges, as it were, upon which the treatment of this abscess turned: First, the operation per rectum; second, the cauterization by sulphate of copper. Both secured a large opening at the lowest portion of the pyogenic cavity, and brought away the unhealthy granulation-tissue. Had the patient consented to have the unobstructed outflow of the pus maintained by one or two subsequent dilations, similar to the first one, the cure would undoubtedly have been more rapid. As it was, the contracting sphincter and abscess outlet rendered the drainage and irrigation imperfect. Progress toward recovery was, however, again inaugurated upon the melting away, by the sulphate of copper, of the newly and imperfectly formed cicatricial tissue, reproducing the opening made at the time of the operation; and by the destruction of the degenerative deposits, and cauterization of the chronic pyogenic surface. The only kind of treatment preferable to this free drainage and clearing out method, is the

strictly antiseptic, which, after the pus has once found a way into the rectum, can only be accomplished by first closing this septic inlet.

The treatment by a counter opening in the vagina is much less preferable, because a recto-vaginal fistula, difficult of cure, and liable, like anal fistula, to inoculate the system with tuberculosis, would be left.

The treatment by abdominal incision cannot for a moment be entertained, for at least two reasons:

1st. It is necessarily followed by a recto-abdominal fistula of great length, which is incapable of being promptly cured, and is apt to become an unfailing source of systemic infection. Those patients already operated upon, as far as reported, have usually either died shortly, or within a year or two, imperfectly cured. They would have, on an average, lived about as long without the operation. In fact, it is not impossible that one such, whom I had an opportunity of watching for a short time previous to the operation, would finally have recovered through the process of nature. To operate as does Lawson Tait, before the abscess has discharged, and then treat it antiseptically through its single opening, is an entirely different matter.

2nd. The danger of an abdominal incision should never be incurred without a prospect of compensatinion the way of bettering the patient's chances of recovery. Neither theory nor practice as yet proves such compensation to be attainable.

In some cases one dilatation per rectum, without after-treatment, has sufficed for a cure; in other cases two or more, with subsequent antiseptic irrigations, have become necessary. But as a general rule it may be said that, unless instituted too late, the procedure is safe and the recovery sure.

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DISCUSSION.

PROFESSOR CHRISTIAN FENGER made some remarks on laparotomy as compared with other operations, of which the following is a brief abstract:

When a peri-uterine abscess points somewhere in the vagina around the lower part of the uterus, no surgeon would, of course, think of doing anything but opening the abscess, inserting a drainage tube, and by washing out, endeavoring to effect the closure of the cavity. But in some cases the opening into the vagina is just as ineffective as a spontaneous opening into the rectum. In obstinate cases of this kind laparotomy, at a later period, will have to be performed.

There is, however, no doubt that secondary invasion of septic poison, when the abscess is opened from the vagina, is much more difficult to prevent than invasion into the abscess from the abdominal opening. It is only in this way that we can account for the difference in the course of the after-treatment of peri-uterine abscesses opened through the vagina and through the abdominal cavity; a difference that Lawson Tait rightly calls attention to as being decidedly in favor of the abdominal operation. Here the abscess closes more quickly, and the course of the after-treatment is much less febrile than in the vaginal operation.

Sometimes a peri-uterine abscess will point into the rectum, sufficiently low down to permit of an opening here. It does not seem probable that the access from the rectum will be very promising, as effective drainage is next to impossible; but the cases of cure by spontaneous opening into the rectum evidently make an operation here permissible, and perhaps advisable, but only as a trial. If the abscess does not retract within a reasonable time, other measures must be resorted to.

It is needless to state that if a parametritic abscess points

anywhere along the iliac fossa, it should be opened and drained from this point; but this does not belong to my subject of to-night, as I desire to call attention only to strictly circum-uterine abscesses, which can only be reached from the vagina or from the supra-pubic region.

When a circum-uterine abscess does not point downward, and, in fact, does not point anywhere, it is then the surgeon's task to find the safest way into the abscess through a smaller or larger amount of surrounding tissues.

We shall first consider the vaginal operation:

When so eminent an authority as Schröder, of Berlin, advocates this method of reaching a high peri-uterine abscess there must be cases in which this operation is advisable. From a general point of view an extra-peritoneal outlet of the abscess through the vagina would seem to be safer than laparotomy, upon the same grounds as a vaginal hysterectomy is safer than Freund's abdominal hysterectomy, and Schröder's successful operation, already mentioned, vouches for the method.

At the same time, I firmly agree with Lawson Tait, that there are some grave objections to the vaginal operation. In the first place, a high-seated peri-uterine abscess is difficult to reach. It is difficult to work with safety two or three inches above the introitus of the vagina, in tissues that are immovable, and where the parts cannot be drawn down toward the operator. These difficulties are, of course, of less importance in the master hands of an operator like Schröder, but increase in significance for less experienced surgeons.

But the operation through the vagina is more or less an operation in the dark. We may be dissecting up along the posterior surface of the neck of the uterus, and may open into recesses of the peritoneal cavity between the abscess and

the uterus. Further, it might be easy in this place to open into the rectum.

Another danger, especially in abscesses between the two layers of the lateral ligament, might easily arise from the rupture of the large uterine vessels running in the wall of the sac. It would be exceedingly difficult, and I should say next to impossible, under such circumstances, to secure and ligate these vessels, the point of ligation being so high up, the working space so small, and the tissues so immovable.

All those objections and dangers we do not encounter in laparotomy. We can see distinctly, and recognize with our own eyes, every particle of tissue we have to divide; the large uterine vessels, if divided, can easily be taken up and ligated. There is no risk of having any communication between the abscess and the peritoneal cavity, which we cannot either close up or drain.

If the laparotomy lasts longer, and gives more technical work to the surgeon, it seems to me that these objections are fully balanced by the advantage of not being obliged to operate in the dark, of not having to battle with enemies that we cannot see, and consequently cannot guard against.

But these are not the only advantages of laparotomy, as compared with the vaginal operation. The free access to the whole interior of the abscess cavity has also to be taken into account. By laparotomy, the abscess is laid open to about the same extent as a tubercular peri-articular abscess. We can examine the whole interior of such a cavity, and scrape off, or remove by other means, whatever objectionable material we may find, cheesy matter, tuberculous tissue, fungoid granulations—since we can see clearly every place where the instrument is applied, without any danger of going through the abscess wall into any surrounding cavity or organ.

It is more than possible that this free access to the abscess wall has something to do with the speedy recovery subsequent to laparotomy, as compared with the vaginal operation.*

But, of course, there will always be connected with laparotomy the inherited dread of opening that ominous peritoneal cavity. Modern surgery, however, is making steady progress in diminishing these dangers. Thus, the dread, as well as the safety of the patient, will, to a great extent, rest in, or depend upon, the care and skill of the operator.

Professor W. H. Byford: I do not wish to comment upon the contents of the paper further than to express myself in reference to the mode of operating adopted in consultation with the gentlemen mentioned. A large number of pelvic abscesses can be managed through the rectum with more facility and safety, than any other medium of approach to the deep-seated portions of the pelvic cavity. I do not know whether there are any cases wholly situated in the pelvic cavity, but that can be reached, opened and evacuated through the rectum. It may not always be the most eligible direction to approach collections of pus. In instances in which the pus is making its way toward the vagina, and fluctuation can be felt through the vaginal walls, it ought to be evacuated through that canal; but when the point of discharge is not thus indicated the exploration is most easily made through the rectum; and all chronic cases that have already commenced to discharge into the rectum can and ought to be treated from the cavity of that viscus. I would make no exception, however high the opening might be, so it was within the pelvic cavity. By proper preparation the whole length of the rectum can be reached from the sphincter to the promontory of the sacrum, and from any part of it the pus evacuated; the pyogenic cavity explored and drainage and irrigation safely and securely accomplished.

* Lawson Tait, op. cit.

I believe the dangers of this mode of operating to be incomparably less than by abdominal section; and the other results of the operation—such as drainage and disinfection—more complete.

To effect the objects mentioned, the sphincter should be stretched to laceration; and until there is no tendency to immediate contractions of the anal opening, and till it can be dilated to the full extent of the rectal cavity. Thus thoroughly opened, the whole extent of the rectum can be explored with great facility and often by means of dilators can be seen, and instruments used under the eye of the operator.

If the pus is to be sought after, palpation with the fingers becomes easy and satisfactory; if it is being evacuated, the orifice seen or felt and such treatment as is desired applied. I very much prefer stretching and tearing for the purpose of increasing the size of the discharging orifice to the use of cutting instruments. The opening will not so readily close and there will not be so much hæmorrhage.

In effecting the discharge of the pus, we should remember that the reason why the pyogenic cavity is at no time wholly obliterated is because there are irregular loculi or pockets so situated that they do not empty themselves. The opening should therefore be made large; the parts torn by the fingers until this inferior margin of the opening is as far below the main body of the cavity as practicable. With the fingers the interior bands and partitions should be completely broken down and the interior of the cavity rendered as nearly symmetrical as possible. This will enable the whole of the contents of the cavity to escape by means of gravity, and the fluids used in irrigation find their way out without difficulty. In addition to this shaping of the cavity, the large granulations—generally so abundant—should be scraped away by the fingers

or by a dull curette, thus freshening up the lining membrane of the pyogenic cavity and converting it from a state of indolent ulceration to one disposed to heal. This process of curetting also produces a change in the capillary circulation that makes nutritive processes more salutary. Often in very indolent cases the sphincter will recover contractile power to such a degree as to require one or more repetitions of the operation. The same thing may be said of the margin of the orifice in the intestine. We will be obliged to enlarge it and treat the cavity as before.

In the case narrated in the paper, the action of the sulphate of copper seemed most useful and contributed the last influence necessary to the cure.

I have said nothing about the more common items of treatment, such as irrigation, disinfection and stimulation. My intention is to show the facility with which, in many instances, these purulent collections can be reached and treated by dilating and distending the rectum and the comparative safety of such proceedings.

Professor E. C. Dudley: The experience of Dr. Byford and others in the treatment of pelvic abscess by this operation must be considered as proving the great value of the operation in cases in which the abscess can be easily approached and thoroughly drained by dilatation of a sinus between the abscess-cavity and the rectum. It would, however, appear on general principles, that sufficiently free and long-continued drainage would in many cases be almost unattainable and that an abscess-cavity left thus to heal must often be the starting point of sinuses formed by the uncontrolled burrowing of pus in many directions. The almost inevitable invasion of the abscess-cavity by fecal matter is clearly a serious factor in connection with the history of these cases. The great mor-

tality from pelvic abscesses opening spontaneously into the bowel demonstrates the inability of nature to provide for adequate drainage. Whatever question, therefore, we may raise relative to the advanced position of Dr. Wm. H. Byford, who, if practicable, would prefer to open a pelvic abscess through the rectum—even in those cases in which nature has not anticipated him—there can be no question about the propriety of enlarging and rendering more effective an opening already formed. I regret that the essayist has marred a most admirable contribution by the sweeping statement that in all cases in which drainage has been spontaneously established through the rectum Lawson Tait's operation is contra-indicated. Nor can I imagine from what premises he has formed the conclusion that Tait's operation prevents closure of the sinus between the abscess-cavity and the rectum. The question naturally arises whether Tait's operation might not in such cases fulfil a well recognized surgical indication by establishing a free counter-opening for an abscess which otherwise might refuse to close on account of imperfect drainage and on account of its forming a blind sac for the retention of fecal matter. To a larger number of recognized authorities, who deem an opening into the rectum, whether produced by nature or by art, a grave misfortune, the query would naturally arise whether such an opening ought not to be supplemented by a counter-opening, which would bring the draining and cleansing of the abscess-cavity within the easy and absolute control of the surgeon. Furthermore, in view of the decided mortality which attends the spontaneous opening of pelvic abscesses into the rectum, and in view of the almost uniformly successful results recorded in the statistics of Tait's operation already published by Mr. Tait and others, and in view of a very generally accepted rule

that the operator in opening a pelvic abscess should strive to keep out of the rectum, I don't think a statement that the rectum is to be preferred as the site of the primary operation ought to go on the records of this society unchallenged.

Professor J. T. Jelks (present by invitation) thought a great mistake was made in waiting too long before operating in cases of chronic pelvic abscess.

Dr. Philip Adolphus thought the paper was beyond the pale of criticism. When the general symptoms indicated a collection of pus, the cavity should be searched for. If a cavity containing serum was found, an operation was contra-indicated. If the cavity contained pus, it should be evacuated.

In closing the discussion, Dr. Henry T. Byford objected to the quotation of Lawson Tait's statistical triumphs in this connection. In the last edition of Tait's *Diseases of the Ovaries*, abdominal section is recommended for those pelvic abscesses only that cannot be successfully evacuated from below. They are generally such as are situated high up, and do not point early in the vagina or rectum, or they are suppurating hæmatoceles.

The statement that the recto-abdominal fistula, left after abdominal section for a pelvic abscess that has already discharged into the rectum, would heal readily, like any artificial anus, is not borne out by facts. Fistulæ connecting the rectum with the external air have seldom healed, when left to themselves, before a long period of time had elapsed. Radical operative measures cannot (in these cases) be resorted to on account of the length, situation and relations, of the fistulous track.